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AUTHOR Tornabene, Ladona
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ABSTRACT

A key element in implementing a health education program is effective delivery of that program. This paper deals with obtaining student feedback regarding utilization of instructional equipment and other instructional media effectively. The SMART classroom (equipped with a Power Macintosh, several software applications, Internet access, video data projector, visual presenter, VCR, and laser disc player--all connected via a mechanical video switcher) and the traditional classroom were compared by students, as well as the delivery of information in color on a 12-by-10 foot screen versus information delivered via an overhead projector with black-and-white transparencies. Feedback of this nature can assist health educators in selecting methods and media best suited to implement program plans for specific learners. Student feedback was overwhelmingly positive regarding the preference for the SMART classroom and its contents. However, since the purpose of this feedback was to obtain an assessment of students' views to better accommodate instructional delivery, traditional methods of instruction in the classroom had merit and were even preferred by some. For this reason, a balanced presentation style combined with a variety of design and delivery are still considered most effective. (AEF)

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The SMART Classroom verses the Traditional Classroom: What the student's are saying...

Ladona Tornabene, Ph.D., CHES

University of South Dakota

Assistant Professor, Health Education

U.S. DEPARTMENT OF EDUCATION
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Ladona Tornabene

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Abstract

As health educators, a key element in implementing a health education program is effective delivery of that program. We can have a stellar package, yet fail because our method of delivery did not suit our target audience.

This paper deals with obtaining student feedback regarding utilization of instructional equipment and other instructional media effectively (Responsibility III, Competency A, Sub-competency 3). The SMART classroom and the traditional classroom were compared by students as well as the delivery of information in color on a 12 by 10 foot screen verses information delivered via an overhead projector with black and white transparencies. Feedback of this nature can assist health educators in selecting methods and media best suited to implement program plans for specific learners (Responsibility III, Competency C).

Student feedback was overwhelmingly positive regarding the preference for the SMART classroom and its contents. However, since the purpose of this feedback was to obtain an assessment of students views to better accommodate instructional delivery, traditional methods of instruction in the traditional classroom indeed had merit and was even preferred by some. For this reason, a balanced presentation style combined with a variety of design and delivery still prevail in this authors' classes.

Feedback is an extremely valuable commodity for educators if we are to better our teaching skills and better accommodate our students. Collecting student generated responses about a particular technology used is indeed a time consuming task, yet by allowing students the freedom to respond in their words, insight can be gained into their thought processes.

The purpose of this article is to share what the students are saying in regard to the SMART classroom verses the traditional classroom, and color on the big screen verses the traditional black and white overheads. Throughout the Spring 1997 semester at the University of South Dakota, 139 students from personal health classes were able to experience both the traditional and the SMART classroom by meeting in each approximately 50% of the time. Feedback on their preference of rooms and the reason for that particular preference was obtained via open ended questions. One hundred and twenty six students participated in this survey, composing a convenience sample. Students feedback were freely generated by them in response to the following question:

Which do you prefer and why?

-Room 110 [SMART classroom] verses this classroom (room. 118 Ed. School)

-Color on the big screen verses black and white overheads

Before sharing their responses, a brief overview of each of the classrooms is merited. Room 118 is the traditional classroom and room 110 is the SMART classroom.

Room 118

A traditional classroom equipped with wall to wall chalkboards in the front and in the back. Desk sit in rows, leg to leg. Perfectly aligned wire baskets eagerly await books or soft drink cans... An overhead projector naps quietly at the front longing to catch a few more winks until in demand again. A traditional screen tucks neatly away, controlled by a pull string the author is still possessing difficulty in mastering.

Room 118 is not a bad room. Sunlight abounds with wall to wall windows spawned with drapery on its west side. Two doors, tile floor, a podium and small table adorn this classroom.

Room 110

Affectionately entitled the SMART classroom, its name forms an abstract path to its contents. Fully equipped with a power Macintosh, several software applications, internet access, a ceiling mounted video data projector, a visual presenter (the Elmo), VCR, and laser disc player are all connected via a mechanical video switcher. A 12 by 10 foot screen serves as a greeter for the students who are seated around modern tables, padded chairs and new carpet. The lighting is low and the atmosphere is a definite contrast from the traditional classroom.

With this said in order to give the reader a better picture of the two classrooms, the students responses will be presented. The first question, "Which classroom do you prefer and why: Room 110 verses this classroom (room. 118)", the responses are as follows: 84% preferred room 110 (the SMART classroom), whereas only 9% preferred room 118 and 7% of the students said they had no preference, that either room was fine by them.

Reasons given for choosing room 110

Of the students who preferred the SMART classroom, below is a percentage breakdown based on student generated responses: (It should be noted that due to more than one response from the students and rounding, percentages may not add up to 100%).

43% mentioned they like the technology used and thought it was easier to see and read from the big screen.

42% commented on liking the atmosphere and comfort of the room.

28% reported having more space in room 110.

19% enjoyed being able to use the tables.

26% found it easier to take notes.

4% reported it was easier to hear in room 110.

6% commented on the ease of interaction with peers and liking the variety and interest the room provided.

Comments regarding room 110

The following are some selected comments made by the students (note, spelling errors have been corrected):

"... room 110 presentations are much better because of the technology available. The presentations are much more interesting, easier to follow, and its just more fun with the technology. I believe that because it is more fun, I retain the information better."

"I prefer room 110. With the technology, slides and visuals it makes for easier note taking. The comfort and plush atmosphere of the room helps to make class more enjoyable."

"I prefer room 110. The chairs are more comfortable. The visual and audio combination make learning the material easier. I like to hear it and see the material too. I thought the pictures of diseases showed us what it was really like. It added a degree of reality you can't get just out of lecturing or out of reading the textbook."

"I like 110 because the room is more up to date but the biggest reason is the other classroom makes me feel as if I'm in high school again."

"In speaking of room 110 and this classroom, I definitely prefer room 110. There are many reasons why I think it's the best room to be taught and lectured in. First, there is more space available for you to breath and jiggle around. You are not bumping into people's arms, desks, or legs that usually occurs in this classroom. Second, you can interact with other students easier. For the reason of how there are tables, which four to five students sit at, which then leads to more of communication channels between the students. In the other classroom, it's difficult to pull your chairs together when there is not enough room. Third, the projection gives easier access in taking notes. Everyone can see. There is not one student who would not be able to see the projection overview. In the other room, you are constantly moving side to side trying to see around another students' head or chair. Simply, room 110 is a better room to be taught in. I feel that with more space, and a bigger room, I tend to listen and concentrate better on the lecture at hand. I'm not

worried about getting the notes taken down properly because with the bigger screen, it's easily attainable."

"I was incredibly impressed when I first sat in room 110. It gave me a feeling that the University is spending our money on things that really benefit the students. What I do not like about it, is that a professor has to get permission to use a room like that. I also do not understand why the computer college itself does not use a classroom like it to teach how to use a computer. I know it would have really helped out a lot with my learning when taking Intro to Programming."

"I prefer room 110. There is more room with the tables to take notes. It also helps to give me a change from the normal classroom setting that I have in my classes all day long. It is a nice change."

"I prefer room 110 because of the technology you use. It keeps the class interesting. You can get the same old lectures in any of the other classes with the same old overheads. It makes the class go by much faster and probably learn more because of the interest."

Reasons given for choosing room 118:

Of the 10% who chose this, reasons were as follows:

-Own desk

-holds attention better

-likes windows

Comments regarding the traditional classroom, room 118

"I prefer this classroom (room. 118) because I don't like the limited space and it is hard to see the screen in room 110. I think the colorful atmosphere and big, bright windows in the classroom creates a more informal environment."

"Personally, I prefer this classroom much more than room 110. This classroom is more airy and brighter. It has a much better atmosphere. It is sometimes rather uncomfortable in room 110 and there are not enough seats for everyone." (Author's note, I think the student is referring to tables as there were certainly enough chairs.)

"Personally, I prefer room 118. I prefer it because I'm always guaranteed a desk, which gives me a hard, flat surface to write on. In room 110, I often get stuck in the back row and have to take notes on my lap. This hurts my back because I'm quite tall and have to bend over constantly."

Color on the big screen verses black and white overheads

The following are percentages of which instructional delivery medium was preferred (percentage slightly off due to rounding error):

80% preferred color on the big screen

8% preferred black and white overheads

13% no preference

Reasons for choosing color on the big screen

The following were reasons given for the student's choosing color on the big screen:

29% said it was easier to read/see

20% got their attention better

23% said color adds life, stands out and increases interest

14% found it fun/exciting and entertaining!

10% said it made for better note taking

8% claimed it aided in retention of material

6% claimed it was more attractive and liked the change of pace

6% said it helped them to understand better, concentrate more and made learning easier

Comments regarding color on the big screen

"As I said before, I would prefer the big screen with color rather than the black and white overhead. I find that the big screen room is much more interesting than the dull black and white overheads. I seem to pay more attention with the lecture. Also I find the information to stick in my head more."

"I guess I like the color on the big screen because it makes it more interesting, and when something is interesting, it is a lot easier to pay attention."

"Any time you can use color its a bonus. This helps keep the attention of the class and makes the discussion more interesting. Students look at chalk boards and black and white overheads all day. It is very nice to have a change. Along with the color presentation I would also like to say that showing actual pictures of diseases and body organ's have a large impact on the discussion. Basically, it puts a visual reference on the definitions which makes it easier to remember later for the exam."

"Color on the big screen is definitely more interesting, but when black and white overheads are used the material is explained very well and I learn just as much and I pay just as much attention to what is being taught. I don't think it matters what the material is being displayed on, it's the way it is explained to us that keeps our attention and interest."

"I prefer color on the big screens a lot better, because there's more creativity that comes along with the big screens, and you can see things a lot more clearer on the big screen. You don't get quite as bored watching and writing things off the big screens compared to the overheads."

"I prefer color on the big screen because it grabs my attention. The black and white overheads give the info. in an organized manner, but I'm practically sleeping through it."

"... the color on the big screen adds much more excitement and makes the class sessions more interesting. I've seen the plain old black and white overheads since seventh grade."

"I prefer color on the big screen. Color adds interest and when combined with audio explanations made recall easier.- The big screen was just a little nicer. We have this technology, why not continue to incorporate it into our learning?"

"That's easy, the color screen. I don't like black and white TV so I don't like the (black and white) overheads. It is also easier to read on the big screen and you show many informative slides!"

"I prefer to have color on the big screen rather than black and white overheads because they are easier to see and grab my attention more. When it comes to test time I can picture the answers in my head as they appeared on the colored screen and not on black and white overheads."

"The color on the big screen is a lot better and easier to follow where the professor is at. The black and white overheads had their time, but let's use the technology we have and use color. The color on the big screen helps keep you interested in the material being covered."

"Color rules! Color rules! Color rules! Why does color rule? Because it does, that's why." (This is one of my favorites!)

Reasons given for choosing black and white overheads

Of the 13% who made their preference for black and white overheads, here are some selected comments:

-color distracting

-color too dark/can't read writing

-likes to see material all at once as opposed to one point at a time

Comments regarding black and white overheads

"The overheads do an adequate job of conveying the information. The color is pretty, but it doesn't serve to make it any more or less interesting for me. Technology doesn't necessarily make everything better."

"Simpler seems to work better for me. I get everything I need from the black and whites without all the bright graphics that are distracting to me at times and the fancy whistles and bells."

Summary

It is interesting to note the diversity of preference among the students. What clearly dominates is the fact that most students do prefer the SMART classroom and most do prefer color on the big screen. As an instructor, I do not abandon the traditional classroom nor the black and white overheads, as they serve a definite purpose for some and even if only a change of pace for others. However, since the technology is available and the majority of the students are benefitting, my goal is to increase the amount of time in the SMART classroom. Perhaps it really does live up to its name!